

IVV QM Appendix A Version: E Effective Date: May 17, 2013

DOWNLOADED AND/OR HARD COPY UNCONTROLLED

Verify that this is the correct version before use.

AUTHORITY		DATE
Ken Vorndran (original signature on file)	IMS Representative	05/16/2013
Ken Vorndran (original signature on file)	Process Owner	03/11/2013

VERSION HISTORY				
Version	Description of Change	Author	Effective Date	
Basic	Initial release; separate document for definitions and acronyms	Stephanie Ferguson	10/10/2007	
A	Updated terms and definitions resulting from re-engineering process	Stephanie Ferguson	04/08/2008	
В	Changed "IV&V Facility" to "IV&V Program"; updated terminology for Annual Document Review	Stephanie Ferguson	06/16/2009	
С	Updated terminology to reflect Program reorganization	Stephanie Ferguson	07/21/2010	
D	Updated to reflect organizational and role changes	Natalie Alvaro	10/24/2011	
E	Remove Program Analyst (PA); add Resource Analyst (RA) and Resource Manager (RM). To align all PFM SLPs and WIs roles and ensure that PFM roles are defined within the QM.	Tara Perdue	05/17/2013	



IVV QM Appendix A Version: E Effective Date: May 17, 2013

A Definitions and Acronyms

The following are general definitions of official NASA IV&V terms and roles, as well as frequently used acronyms. Specialized definitions and acronyms are identified in individual IMS documents.

A.1 Administrative Office

The Administrative Office comprises employees who direct a variety of support functions and services, and provide administrative assistance to Program Management. Administrative personnel have knowledge of NASA operations, policies, and procedures.

A.2 Alternate Contracting Officer Technical Representative (Alternate COTR)

The Alternate COTR is a NASA IV&V civil service employee nominated by Program Management and delegated by the Contracting Officer (CO). The Alternate COTR is responsible for COTR duties and responsibilities during short absences of the COTR as indicated by a notification from the COTR or by notification of any type of leave to be taken by the COTR.

A.3 Approving Official

The Approving Official is a NASA IV&V civil service employee who reviews and approves Document Change Requests (DCRs). The Approving Official is the NASA IV&V Management System (IMS) Manager for all IMS documents. The IMS Manager will coordinate with the IMS Representative for approval on Quality Manual DCRs.

A.4 Associate Director

The Associate Director is a NASA IV&V civil service employee who assists the NASA IV&V Director with the management, leadership, and operation of the NASA IV&V Program.



IVV QM Appendix A Version: E Effective Date: May 17, 2013

A.5 Capability Development (CD) Group

The CD Group advances processes, tools, and knowledge through the exploration and integration of practical solutions. The CD Group operates as a function of the IV&V Office.

A.6 Capability Development (CD) Group Lead

The CD Lead is a NASA IV&V civil service employee who implements and manages the C&D Group. The CD Lead reports to the IV&V Office Lead.

A.7 Concurrence Sheet

The Concurrence Sheet, or Form 1007, is used to capture concurrence by Program Management, Project Managers (PMs), etc., that a product has been reviewed and is acceptable for delivery to the customer.

A.8 Configuration Control Board (CCB)

A CCB is a team of NASA IV&V civil service and/or contract employees responsible for analyzing and approving changes to software, web sites, or other applications.

A.9 Contracting Officer (CO)

A CO is a Goddard Space Flight Center (GSFC) civil service employee who specializes in contract-related functions. A CO is a contract specialist with the authority to enter into, administer, and/or terminate contracts, and to make related determinations and findings (see Federal Acquisition Regulation [FAR] 2.101).

A.10 Contracting Officer Technical Representative (COTR)

The COTR is a NASA IV&V civil service employee nominated by Program Management and delegated by the CO to perform technical management of a contract in accordance with FAR and NASA FAR Supplement (NFS) guidelines.



IVV QM Appendix A Version: E Effective Date: May 17, 2013

A.11 Contractor

A contractor is a non-NASA individual or entity that enters into a legal contract with the NASA IV&V Program to perform an activity or service for the NASA IV&V Program.

A.12 Corrective Action

A corrective action is an action taken to eliminate the root cause of an existing nonconformance and correct its associated process and documentation in order to prevent reoccurrence of the nonconformance.

A.13 Corrective Action Request (CAR)

A CAR is a request for corrective action to address a nonconformance in a product or process. A CAR can result from multiple activities or come from multiple sources (e.g., internal or external audits, Program Management's review of the IMS, customer complaints, Lessons Learned). A CAR is used to prompt action to resolve a current concern or nonconformity and prevent its reoccurrence by correction of the associated documented process and requirements.

A.14 Corrective and Preventive Action System (CAR/PAR System)

The CAR/PAR System is an ECM workflow used to house the NASA IV&V Program's CARs and preventive action requests (PARs).

A.15 Customer

A customer is any individual or organization who is the purchaser, user, or recipient of a product or service or information provided by the NASA IV&V Program, or who has direct interest in or can be affected by the actions of the NASA IV&V Program. A customer can be internal or external to the NASA IV&V Program. Examples of customers include the OSMA, Office of the Chief Engineer (OCE), NASA Projects, groups such as the Knowledge Management or Technical Quality and Excellence (TQ&E) groups, and the local community.



IVV QM Appendix A Version: E Effective Date: May 17, 2013

A.16 Deputy Director

The Deputy Director is a NASA IV&V civil service employee who serves as the NASA IV&V Director when he/she is not available and assists the NASA IV&V Director with the management, leadership, and operation of the NASA IV&V Program.

A.17 Document Change Request (DCR)

A DCR, or Form 1000, is used to propose the creation of a new IMS document (system level procedure [SLP], work instruction [WI], supporting document, template, or form), or to recommend revision or cancellation of an existing IMS document.

A.18 Document Control Custodian (DCC)

The DCC is a NASA IV&V civil service employee or alternate responsible for the control of documents and records. DCC duties include creating, processing, and maintaining the record of DCRs, the IMS Master List and all IMS Document changes. The DCC also serves as the Record Liaison by ensuring that all IV&V Records are identified and dispositioned in accordance with NPR 1441.1.

A.19 Enterprise Content Management (ECM) System

The ECM System refers to the Information Technology (IT) tool used to capture, manage, store, preserve, and deliver electronic content and documents for the NASA IV&V Program. The ECM System is also known as Livelink.

A.20 Execution Plan

An execution plan is an annual planning document developed and maintained by each IV&V Progam Office (IVVO, SCO, SSO, and PSO) that outlines and defines how that Office/Group will conduct business during the fiscal year (FY) in order to support the achievement of the objectives instituted in the Program Execution Plan (PEP).



IVV QM Appendix A Version: E Effective Date: May 17, 2013

A.21 Executive Assistant

The Executive Assistant works in the Administrative Office and is responsible for managing the NASA IV&V Director's calendar, coordinating travel, timekeeping, and preparing documentation.

A.22 Executive Dialog

An Executive Dialog is a formal meeting or teleconference held on a periodic basis (e.g., monthly, quarterly) to promote dialogue between Program Management and customer management (e.g., NASA Headquarters [HQ], NASA Center, or contractor management).

A.23 FedTraveler

FedTraveler (http://www.fedtraveler.com) is NASA's automated travel management system.

A.24 Form

A form is a document associated with a policy, procedure, or process employed by the NASA IV&V Program. Forms can be downloaded from the IMS web site (http://ims.ivv.nasa.gov).

A.25 Formal Agreement (FA)

An FA is a document used to identify the managerial, technical, and business aspects of an agreement between the NASA IV&V Program and a customer or contractor.

A.26 Functional Lead

The Functional Lead is a NASA IV&V civil service employee who manages a functional organization within the NASA IV&V Program. All Office Leads are also Functional Leads.



IVV QM Appendix A Version: E Effective Date: May 17, 2013

A.27 Functional Organization

A functional organization is a group of hierarchically organized personnel who perform work for one of the NASA IV&V Program's business functions. Functional organizations include all NASA IV&V Offices, as well as the Program Financial Management (PFM) Group.

A.28 Goddard Space Flight Center (GSFC)

GSFC is the NASA Center that provides critical administrative leadership and management support for the NASA IV&V Program, including legal, procurement, and Office of Human Capital Management (OHCM) support.

A.29 Goddard Space Flight Center (GSFC) Office of Human Capital Management (OHCM)

The GSFC OHCM supports the NASA IV&V Program by providing NASA IV&V human capital resources.

A.30 IMS Manager

The IMS Manager is a NASA IV&V civil service employee who is designated by Program Management to manage the IMS and provide active support to the IMS Representative in the establishment, implementation, and maintenance of the IMS. The IMS Manager is also responsible for managing the Internal Assessment Audit Program, and the Corrective and Preventative Action (CAR/PAR) system.

A.31 IMS Mapping Diagram

The IMS Mapping Diagram is a cross-reference table that depicts the relationships among IMS documents, other reference documents, and documented standards as they appear in the Reference Documents tables of each IMS document.

A.32 IMS Master List

The IMS Master List is a document located on the IMS web site (http://ims.ivv.nasa.gov) that lists each SLP or WI with its latest version



IVV QM Appendix A Version: E Effective Date: May 17, 2013

letter, effective date, PO, Approving Official, and associated DCR number. The IMS Master List also lists each form, template, and supporting document with its latest revision letter, effective date, PO or parent SLP or WI, and associated DCR number. The IMS Master List is maintained by the DCC.

A.33 IMS Representative

The IMS Representative is a NASA IV&V civil service employee and member of Program Management designated to be responsible for the establishment, implementation, and maintenance of the IMS. The IMS Representative is an International Organization for Standardization (ISO)-certified Lead Auditor and is responsible for ensuring the reporting of the performance of the IMS to Program Management as well as promoting awareness of the requirements and procedures contained in the IMS. The IMS Representative may appoint the IMS Manager to be his/her designee in fulfilling IMS Representative duties.

A.34 Information Technology (IT) Group

The IT Group is primarily responsible for desktop hardware and software, data center, application, messaging and collaboration (e.g., email, calendars), IT security, and communication services (e.g., voice, wide area network [WAN], local area network [LAN], video). The IT Group operates as function of the Program Support Office.

A.35 Information Technology (IT) Lead

The IT Lead is a NASA IV&V civil service employee who implements and manages the IT Group and acts as a liaison between the IT Group and the other NASA IV&V offices and external NASA customers. The IT Lead reports to the Program Support Office Lead.

A.36 Internal Assessment Audit Program

The Internal Assessment Audit Program establishes how audits of the IMS shall be planned, scheduled, and conducted, and how audit results shall be documented and reported to Program Management.



IVV QM Appendix A Version: E Effective Date: May 17, 2013

A.37 IV&V Board of Advisors (IBA)

The IBA is chaired by the OSMA Chief of Safety and Mission Assurance, and comprises representatives from each Mission Directorate Associate Administrator (AA), the Chief Information Officer (CIO), the Chief Engineer, the Director of GSFC, and the NASA IV&V Program Director. The IBA is responsible for selecting customer projects for NASA IV&V Program-funded IV&V.

A.38 IV&V Monthly Program Review

An IV&V Monthly Program Review is a meeting or teleconference held monthly by Senior Leadership to review the status of each functional organization.

A.39 IV&V Office (IVVO)

The IV&V Office is responsible for ensuring the delivery of superior performance in independent verification and validation by providing high-confidence expertise in software safety and mission assurance. The IV&V Office includes four groups that specialize in the following areas: IV&V, Capability Development (CD), Technical Quality and Excellence (TQ&E), Jon McBride Software Testing and Research (JSTAR), and Software Assurance Tools (SWAT).

A.40 IV&V Office Lead

The IV&V Office Lead is a NASA IV&V civil service employee who is responsible for management and oversight of the IV&V Office. The IV&V Office Lead is a member of Senior Leadership.

A.41 IV&V Project

An IV&V Project is an IV&V or Independent Assessment task being performed by the NASA IV&V Program for a specific customer.

A.42 IV&V Project Execution Plan (IPEP)

The IPEP is an agreement between the NASA IV&V PM and the NASA



IVV QM Appendix A Version: E Effective Date: May 17, 2013

IV&V Program regarding the planned work, schedule, and resources required to execute an IV&V Project. The IPEP is also used to inform the customer of work activities.

A.43 Metric Owner

A Metric Owner is the NASA IV&V civil service employee responsible for establishing, maintaining, updating, and reporting each metric included in the NASA IV&V Metrics Program.

A.44 Metrics Table

The Metrics Table is the NASA IV&V Program-wide Metrics Table used to capture NASA IV&V Program metrics. The Metrics Table is maintained by the Metrics Table Reviser (MTR).

A.45 NASA IV&V Director

The NASA IV&V Director is a civil service employee who manages and leads the operations of the NASA IV&V Program and the NASA IV&V Facility.

A.46 NASA IV&V Filing System (Filing System)

The Filing System is the system in which all physical and electronic project and Program files are housed. The Records Liaison maintains the Filing System.

A.47 NASA IV&V Management System (IMS)

The IMS is the NASA IV&V Program's quality management system. The IMS was established according to NASA Policy Directive (NPD) 1280.1, NASA Integrated Management System Policy. The IMS establishes process guidelines through SLPs, WIs, templates, supporting documents, and forms to ensure that customers receive the highest quality products and services. The IMS also ensures that the processes conducted by the NASA IV&V Program conform to ISO 9001:2008 Standard requirements. All IMS documents can be accessed on the IMS web site (http://ims.ivv.nasa.gov).



IVV QM Appendix A Version: E Effective Date: May 17, 2013

A.48 NASA IV&V Metrics Program

The NASA IV&V Metrics Program is a system that facilitates the establishment, collection, analysis, and communication of metrics for the NASA IV&V Program.

A.49 NASA IV&V Program

The NASA IV&V Program functions operationally under the guidance of the OSMA Chief of Safety and Mission Assurance while receiving administrative leadership and management support from GSFC. The NASA IV&V Director serves as the NASA IV&V Program Manager and reports directly to the OSMA Chief of Safety and Mission Assurance.

A.50 NASA Online Directive Information System (NODIS)

NODIS is an online repository that maintains the latest versions of all active NPDs and NASA Procedural Requirements (NPRs).

A.51 Nonconformance

A nonconformance is a lack of compliance with a specified IMS process or procedure, a nonconforming product, or a deficiency in the IMS itself.

A.52 Office of Safety and Mission Assurance (OSMA)

The OSMA assures the safety and enhances the success of all NASA activities through the development, implementation, and oversight of NASA-wide safety, reliability, maintainability, and quality assurance policies and procedures. The OSMA is located at NASA HQ in Washington, DC, and operates as a function of NASA HQ, reporting to the NASA Administrator.

A.53 Office of the Director

The Office of the Director is responsible for the overall management of the NASA IV&V Program and NASA IV&V Facility. It includes the NASA IV&V Director, Deputy Director, Associate Director, PFM Lead, and other



IVV QM Appendix A Version: E Effective Date: May 17, 2013

administrative staff to support the Office's various functions. These functions include customer and stakeholder relations, the Technical Advisory Board, IT governance, strategic planning, financial management, legislative affairs, all procurement/contract management, human resources, Equal Employment Opportunity (EEO)/diversity, training, public affairs (to include communications with the public and news media compliant with Center/Agency regulations) and legal interfaces with GSFC.

A.54 Operations and Maintenance (O&M) Group

The O&M Group is responsible for ensuring a safe, comfortable, and well-equipped workplace that is conducive to high performance and supports individual and team productivity. The O&M Group operates as a function of the Program Support Office.

A.55 Operations and Maintenance (O&M) Lead

The O&M Lead is a NASA IV&V civil service employee who implements and manages the O&M Group. The O&M Lead reports to the Program Support Office Lead.

A.56 Point of Contact (POC)

The POC is an identified employee of a customer organization to which the NASA IV&V Program is providing services. The POC facilitates the IV&V tasks to be performed through coordination between Project personnel, the Project's safety and mission assurance personnel, and the NASA IV&V PM.

A.57 Preventive Action

A preventive action is an action taken to address a weakness in a management system that is not yet responsible for causing nonconforming product or service.

A.58 Preventive Action Request (PAR)

A PAR is a request for preventive action to address a potential



IVV QM Appendix A Version: E Effective Date: May 17, 2013

nonconformance in a product or process. A PAR can result from multiple activities or come from multiple sources (e.g., internal or external audits, actions from Program Management's review of the IMS, customer complaints, Lessons Learned). A PAR is used to resolve a potential concern or nonconformity and prevent its occurrence by review of the associated documented process and requirements.

A.59 Principal Investigator (PI)

The PI is the lead researcher who conducts research. If the PI is a NASA civil service employee, the PI may also serve as the NPOC; however, depending on the nature of the research, NASA may choose to appoint another person to serve as the initiative NPOC. If the PI is from a commercial or academic institution, NASA may choose to appoint a civil servant to serve as the NPOC for the initiative.

A.60 Process Owner (PO)

The PO is a NASA IV&V civil service employee whose job duties are related to a procedure. The PO is assigned by the IMS Manager through approval by the IMS Representative (who is a member of Program Management) to be the lead of an established SLP, WI or Form and its affiliated documentation.

A.61 Program Execution Plan (PEP)

The PEP is a document designed to outline the planned work, schedule, and resources required to accomplish the NASA IV&V Program's goals for a given FY. The PEP establishes an integrated management mechanism that defines the expected outcomes, processes, roles and responsibilities, and communication paths needed to uphold the goal of continuous improvement put forth in the NASA IV&V Program's Quality Policy.

A.62 Program Financial Management (PFM) Group

The PFM Group comprises NASA IV&V civil service employees who are responsible for ensuring the overall integrity of the financial dollars for the NASA IV&V Program and for implementing financial controls through various systems. Though the PFM Group is technically a function of the Office of the Director, the PFM Lead is a member of Senior Leadership.



IVV QM Appendix A Version: E Effective Date: May 17, 2013

A.63 Program Financial Management (PFM) Lead

The PFM Lead is a NASA IV&V civil service employee who is responsible for management and oversight of the PFM Group. The PFM Lead is a member of Senior Leadership.

A.64 Program Management

Program Management includes the NASA IV&V Director, Deputy Director, and Associate Director.

A.65 Program Support Office (PSO)

The Program Support Office is responsible for numerous activities in support of all functional organizations across the NASA IV&V Program. These activities include overseeing the IT and O&M Groups.

A.66 Program Support Office Lead

The Program Support Office Lead is a NASA IV&V civil service employee who is responsible for management and oversight of the Program Support Office. The Program Support Office Lead is a member of Senior Leadership.

A.67 Project File

A Project File is a file that provides a controlled location to house electronic and physical quality records for each IV&V Project.

A.68 Project Lead

See Project Manager.

A.69 Project Manager (PM)

The PM is a NASA IV&V civil service employee selected by Program Management to perform project management functions. The PM reports to the IV&V Group Lead.



IVV QM Appendix A Version: E Effective Date: May 17, 2013

A.70 Public Affairs Officer

The Public Affairs Officer is a NASA IV&V civil service employee who is responsible for the communicating information about the NASA IV&V Program to the public and the news media. The Public Affairs Officer coordinates release of such communications through appropriate GSFC and NASA HQ Public Affairs Offices.

A.71 Quality Manual (QM)

The QM is a document that defines the manner in which the NASA IV&V Program implements the IMS. The QM defines the relationships between ISO 9001:2008 Standard requirements and IMS procedural documents.

A.72 Quality Policy

The Quality Policy is the course of action intended to influence and determine decisions, actions, and other matters relating to the NASA IV&V Program's commitment to providing superior quality products and services, through continuous improvement, that meet or exceed customer requirements.

A.73 Quarterly Management Review (QMR)

The QMR is a Program Management-performed quarterly review of the suitability, adequacy, and effectiveness of the IMS. The QMR also covers the CAR/PAR System, the internal and external assessment audit programs, and the NASA IV&V Metrics Program.

A.74 Resource Analyst (RA)

A member of the PFM Group that is responsible for the entry and tracking of financial data.

A.75 Resource Manager (RM)

A member of the PFM Group that is responsible for monitoring, approving and reporting of Program financial data.



IVV QM Appendix A Version: E Effective Date: May 17, 2013

A.76 Risk Management Team

The Risk Management Team facilitates risk management for the NASA IV&V Program by monitoring, tracking, dispositioning, and measuring risk data, by hosting Risk Review Board (RRB) meetings, and by ensuring that Program documentation is compliant with Agency directives.

A.77 Safety and Mission Assurance (SMA) Support Office (SSO)

The SMA Support Office is responsible for the management of software engineering services provided to the Agency in support of the OSMA, the OCE and other SMA organizations. This office includes the SSO Services Group and hosts the OSMA Software Assurance Research Program (SARP).

A.78 Safety and Mission Assurance Support Office (SSO) Lead

The SSO Lead is a NASA IV&V civil service employee who is responsible for management and oversight of the SMA Support Office. The SSO Lead is a member of Senior Leadership.

A.79 Safety and Mission Assurance Support Office (SSO) Services Group

The SSO Services Group comprises civil service and contract employees and is responsible for providing expert review and input on Agency software-related standards, documentation, and processes in order to support software engineering efforts for the Agency. The SSO Services Group operates as a function of the SMA Support Office.

A.80 Science, Technology, Engineering, and Math (STEM) Initiatives Group

The STEM Initiatives Group manages all NASA IV&V activities in support of the Agency's commitment to make STEM education available to the public through students, educators, and universities. STEM activities include student outreach, education, and community relations.



IVV QM Appendix A Version: E Effective Date: May 17, 2013

A.81 Science, Technology, Engineering, and Math (STEM) Initiatives Lead

The STEM Initiatives Lead is a NASA IV&V civil service or contract employee who is responsible for managing the STEM Initiatives Group. The STEM Initiatives Lead reports to the Strategic Communications Office Lead.

A.82 Senior Leadership

Senior Leadership is the governing body that comprises Program Management, Office Leads, and the PFM Lead. Senior Leadership is responsible for providing input on Program Management decisions at the request and discretion of Program Management.

A.83 Software Assurance Research Program (SARP)

The SARP is one of nine programs delegated to the management of a Program Executive and a Delegated Program Manager under the OSMA. It is hosted by the NASA IV&V Program under the SMA Support Office. SARP was conceived to identify, develop, adopt, and integrate software assurance and engineering best practices into NASA missions and programs. The program focuses on applied research that has the potential to support more informed decision making, to improve safety and reliability, and to reduce the cost of mission success.

A.84 Software Assurance Research Program (SARP) Delegated Program Manager

The SARP Lead is a NASA IV&V civil service employee who serves the OSMA as the Delegated Program Manager for their SARP. The SARP Lead is hosted by the NASA IV&V Program but works directly for the OSMA.

A.85 Software Assurance Tools (SWAT) Group

The SWAT Group is responsible for the Computer Aided Software Engineering (CASE) tools that are needed to support the IV&V Office. The SWAT Group is also responsible for assisting with the integration of tools advanced through R&D, maintaining the tools, and providing



IVV QM Appendix A Version: E Effective Date: May 17, 2013

knowledge and assistance in the use of the tools and solutions. The SWAT Group operates as a function of the IV&V Office.

A.86 Software Assurance Tools (SWAT) Lead

The SWAT Lead is a NASA IV&V civil service or contract employee who implements and manages the SWAT Group. The SWAT Lead reports to the IV&V Office Lead.

A.87 Strategic Communications Office (SCO)

The Strategic Communications Office (SCO) is responsible for internal communications within the NASA IV&V Program, as well as external communications and STEM activities. The SCO is responsible for program-level knowledge management functions within the IV&V Program to include: Program Execution Planning, IV&V Management System and ISO Certification, Statement of Assurance, surveys, Risk Management, Lessons Learned, Success Stories, Program Metrics, and Records Management

A.88 Strategic Communications Office Lead

The Strategic Communications Office Lead is a NASA IV&V civil service employee who is responsible for management and oversight of the Strategic Communications Office. The Strategic Communications Office Lead is a member of Senior Leadership.

A.89 Supporting Document

A supporting document is a document that describes the structure, purpose, operation, maintenance, and/or requirements for a NASA IV&V construct, system, or process.

A.90 System Level Procedure (SLP)

An SLP is a document that provides the principles and operating procedures for a specific aspect of the IMS. An SLP defines the responsibilities of and relationships between organizations implementing procedures within the IMS. An SLP describes what actions shall be



IVV QM Appendix A Version: E Effective Date: May 17, 2013

performed, as well as when, where, and by whom those actions shall be performed.

A.91 Task Monitor

A Task Monitor is the technical liaison who serves between a contractor and its COTR. The Task Monitor is responsible for monitoring, evaluating, and assessing the contractor's performance in assigned areas, including the delivery of any final product and/or services identified in the contractor's Task Order Statement of Work (SOW). The Task Monitor documents the contractor's performance against assigned evaluation criteria.

A.92 Task Order Management System (TOMS)

TOMS is a web-based data repository of contracts, task orders, and task order modifications hosted by a GSFC server and used by Task Monitors, the PFM Lead, COTRs, contract specialists, vendors, and the CO.

A.93 Technical Quality and Excellence (TQ&E) Group

The TQ&E Group administers and maintains the methods, assurance tools, and engineering knowledge necessary to provide evidence-based software mission assurance. The TQ&E Group maintains and consults on IV&V processes, standards and guidelines and is responsible for ensuring adherence to applicable IV&V processes and standards. The TQ&E Group assesses the quality and consistency of IV&V results across all IV&V Projects. The TQ&E Group operates as a function of the IV&V Office.

A.94 Technical Quality and Excellence (TQ&E) Lead

The TQ&E Lead is a NASA IV&V civil service employee who implements and manages the TQ&E Group. The TQ&E Lead reports to the IV&V Office Lead.

A.95 Template

A template is a document or file with a preset format that is used as a



IVV QM Appendix A Version: E Effective Date: May 17, 2013

starting point for constructing various NASA IV&V documents. The purpose of a template is to promote consistency among documents and to prevent having to recreate the format each time a new document is developed.

A.96 Tools Lab

See Software Assurance Tools (SWAT) Group

A.97 Tools Lab Lead

See Software Assurance Tools (SWAT) Lead

A.98 TrackWise

TrackWise is the database used to house the NASA IV&V Program's CAR/PAR system prior to March 1, 2011. TrackWise was also known as the CAR/PAR System, but has been replaced by an ECM workflow.

A.99 Web Site Support Project Lead

The Web Site Support Project Lead (or designee) is a NASA IV&V civil service employee assigned to manage web site development and support processes under the Knowledge Management Group.

A.100 WebTADS

WebTADS is NASA's electronic time and attendance recording system used by NASA IV&V civil service employees.

A.101 West Virginia University Research Corporation (WVURC)

The WVURC is an organization associated with West Virginia University (WVU). WVURC owns the NASA IV&V Facility and the property on which the Facility is located. The WVURC provides various services for the NASA IV&V Program.



IVV QM Appendix A Version: E Effective Date: May 17, 2013

A.102 Work Instruction (WI)

A WI is a document that provides detailed, systematic instructions on how to perform the specific tasks necessary to ensure consistent working methods and conformance to required quality standards. WIs may be presented as flow charts, assembly or inspection procedures, detailed process instructions, manuals, specifications, standards, or other methodologies.



IVV QM
Appendix A
Version: E
Effective Date:
May 17, 2013

A.103 Acronyms

AA	Associate Administrator
CD	Capability Development
CAR	Corrective Action Request

CASE Computer Aided Software Engineering

CCB Configuration Control Board
CIM Center Initiative Management
CIO Chief Information Officer
CO Contracting Officer

COTR Contracting Officer Technical Representative

DCC Document Control Custodian
DCR Document Change Request
ECM Enterprise Content Management
EEO Equal Employment Opportunity

FA Formal Agreement

FAR Federal Acquisition Regulation

FRC Federal Records Center

FY Fiscal Year

G&A General and Administrative
GSFC Goddard Space Flight Center

HQ NASA Headquarters

IBA NASA IV&V Board of Advisors
IEM Integrated Enterprise Management

IEMP Integrated Enterprise Management Program

IMS NASA IV&V Management System IPEP IV&V Project Execution Plan

ISO International Organization for Standardization

IT Information Technology

IVVO Independent Verification and Validation Office

JPL Jet Propulsion Laboratory

JSTAR Jon McBride Software Testing and Research

LAN Local Area Network

MCCB Metrics Configuration Control Board

MOA Memorandum of Agreement

NF NASA Form

NFS NASA FAR Supplement

NOI Notice of Intent

NODIS NASA Online Directive Information System



IVV QM Appendix A Version: E Effective Date: May 17, 2013

NPD	NASA Policy Directive
NPR	NASA Procedural Requirements
NSSC	NASA Shared Services Center
O&M	Operations and Maintenance
OCE	Office of the Chief Engineer
OHCM	Office of Human Capital Management
ORBIT	Observation, Requirements (or Risks), Backlog and Issue
011211	Tracking
OSMA	Office of Safety and Mission Assurance
PAR	Preventive Action Request
PEP	Program Execution Plan
PFM	Program Execution Figure Program Financial Management
PI	Principal Investigator
PITS	Project Issue Tracking System
PL	Project Lead
PM	Project Lead Project Manager
PO	Process Owner
POC	Point of Contact
POP	Program Operating Plan
PR	Purchase Request
PSO	
QM	Program Support Office
	Quality Manual
QMR	Quarterly Management Review
RFO	Request for Offer
RFP	Request for Proposal
RRWS	Research Results Web Site
SARP	Software Assurance Research Program
SCO	Strategic Communications Office
SEB	Source Evaluation Board
SETA	Science and Engineering Technical Assessments
SLP	System Level Procedure
SMA	Safety and Mission Assurance
SOW	Statement of Work
SSO	SMA Support Office
STEM	Science, Technology, Engineering, and Math

Task Order Management System

Technical Quality and Excellence

Software Assurance Tools

Software Working Group

SWAT

SWG

TOMS TQ&E



IVV QM Appendix A Version: E Effective Date: May 17, 2013

WBS Work Breakdown Structure

WebTADS Web-based Time and Attendance Distribution System

WI Work Instruction

WVU West Virginia University

WVURC West Virginia University Research Corporation